

Method and Apparatus for Programmable Network Router and Switch

ABSTRACT OF THE DISCLOSURE

A system is described which enables provision of information to a stored program operating on a computer coupled to the network. A device connected to the network includes input ports for receiving information and output ports for providing the received information to a destination. The computer is coupled to receive information from the output port, which information is addressed to the computer. Within the device a flow control table holds entries which include source addresses representative of at least one source of information arriving at the device input ports, destination addresses representative of at least one of the destinations to which the arriving information is to be sent from an output port. The table entries also include action information for each address, and the action information can take the form of a program reference. When the information is received by the computer it can use the received information in execution of the stored program.